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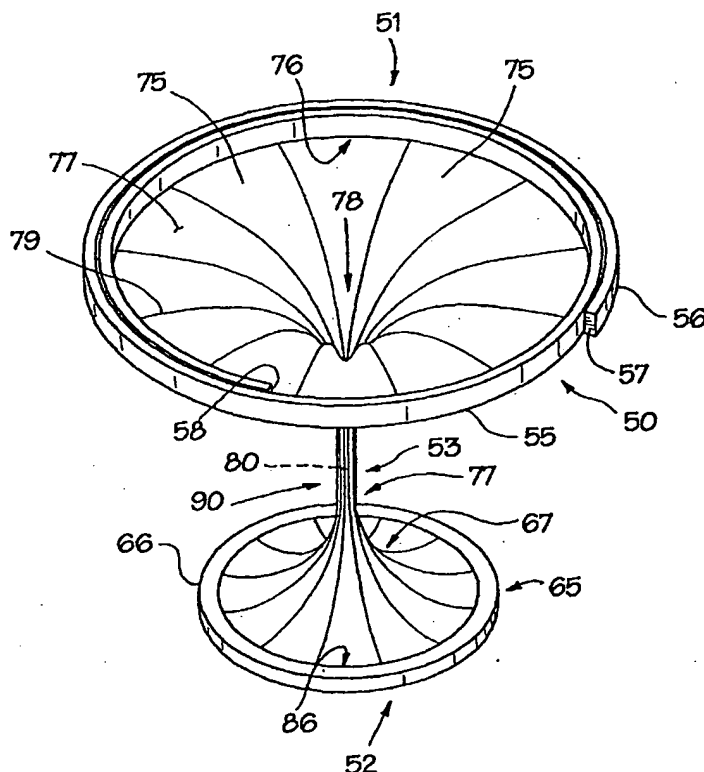
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(54) Title: **SEALED SURGICAL ACCESS DEVICE**



(57) Abstract: A surgical device (50) is adapted to facilitate access through an incision (100) in a body wall (18) having an inner surface and an outer surface, and into a body cavity of a patient. The device includes (55) and second (65) retention members adapted to be disposed in proximity to the outer surface and the inner surface of the body wall, respectively. A membrane (75) extending between the two retention members form a throat (90) which is adapted to extend through the incision (100) and form a first funnel extending from the first retention member (55) into the throat (90), and a second funnel extending from the second retention member (65) into the throat (90). The throat of the membrane has characteristics for forming an instrument seal in the presence of an instrument and a zero seal in the absence of an instrument. The first retention member (55) may include a ring with either a fixed or variable diameter.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/50160

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 1/32  
US CL : 606/108, 1; 604/206, 208

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 606/108, 1; 604/204, 206, 207, 208; 604/513, 264, 539

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,906,577 A (BEANE et al.) 25 May 1999 (25.05.1999), cols 5-6.	1, 2, 4, 15, 16, 19
X	US 4,984,564 A (YUEN) 15 January 1991 (15.01.1991), Figs 1-2.	19
X	US 6,033,426 A (KAJI) 07 March 2000 (07.03.2000), entire document.	1-4, 15, 16
X	US 5,652,705 A (DE LA TORRE et al.) 05 August 1997 (05.08.1997), col 9.	1, 15-17
X	US 5,514,133 A (GOLUB et al.) 07 May 1996 (07.05.1996), cols 3-4.	1, 2, 4, 21
X, E	US 6,383,162 B1 (SUGARBAKER) 07 May 2002 (07.05.2002), entire document.	24
X, P	US 6,254,534 B1 (BUTLER et al.) 03 July 2001 (03.07.2001).	1
A	US 5,741,298 A (MACLEOD) 21 April 1998 (21.04.1998), entire document.	1
A, E	US 2002/0068923 A1(CALDWELL et al.) 06 June 2002 (06.06.2002), entire document.	1

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